

9
CLAIMS

1. A method for improving one or more physical/chemical characteristics of a ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-
5 solution, which method comprises the steps of:
a) provision of a ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-
solution, and
b) addition of at least one buffer based on a weak acid
to the ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution.
10
2. The method according to claim 1, wherein the improved
physical/chemical characteristic is the ability of the
 ^{18}F -FDG-solution to be autoclaved, thus rendering the
solution suitable for medical applications.
15
3. The method according to claim 1, wherein the improved
physical/chemical characteristic is reduced radiolysis
in the ^{18}F -fluor-deoxy-glucose (FDG)-solution.
204. The method according to claim 1, wherein the buffer
based on a weak acid, is selected from the group
consisting of citrate, acetate, ascorbate and
combinations thereof.
255. The method according to claim 4, wherein the pH of the
citrate buffer is lower than 5.5, preferably between pH
2 and 5.5.
6. The method according to claim 4, wherein the pH of the
30 acetate buffer is between 3.0 and 5.5.

7. The method according to claim 4, wherein the pH of the ascorbate buffer is between 3.0 and 5.5.
8. A method of preparing a sterile ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution by autoclaving a ^{18}F -fluor-deoxy-glucose (FDG)-solution at a temperature between 110°C and 145°C .
9. A method of preparing a sterile ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution by autoclaving a ^{18}F -fluor-deoxy-glucose (FDG)-solution at a temperature between 130°C and 140°C .
10. A method of preparing a sterile ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution by autoclaving a ^{18}F -fluor-deoxy-glucose (FDG)-solution at a temperature of 134°C .
11. The method according to claim 8, wherein the autoclaving process is performed for a period of 1 to 30 minutes.
12. The method according to claim 8, wherein the autoclaving process is performed for a period of 1 to 10 minutes.
13. The method according to claim 8, wherein the autoclaving process is performed for a period of 2 to 5 minutes.
14. A ^{18}F -fluor-deoxy-glucose (FDG)-solution with improved physical/chemical characteristics obtained by the method of claim 1.
15. A sterile fludeoxyglucose (FDG)-solution obtained by the method of claim 8.